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09/774,266	01/30/2001	Lotfi Hedhli	3055-002-01	9985

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EXAMINER

CHEUNG, WILLIAM K

ART UNIT PAPER NUMBER

1713

DATE MAILED: 09/15/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/774,266

Applicant(s)

HEDHLI ET AL.

Examiner

William K Cheung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 12-14, 16-32 and 34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9, 11, 15 and 33 is/are rejected.
- 7) ☒ Claim(s) 4, 5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

### **DETAILED ACTION**

1. The examiner acknowledges the receipt of Amendment (Paper No. 12) filed September 4, 2003. Claims 1-34 are pending. Claims 12-14, 16-32 and 34 are drawn to non-elected subject matter.

2. Regarding applicants' request that the Partial Search Report for European Application No. 01916103 listed in IDS (Paper No. 9) should be considered, applicants would like to inform applicants that dates are required in order to a reference to be considered in the PTO-1449 form.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 7, 15, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Lunkwitz et al. (US 5,540,837).

*The invention of claims 1, 7, 15, 33 relates to a **polymer blend** comprising:*

- a) at least one **acrylic resin** or at least one acrylic resin and at least one vinyl resin, wherein said at least one acrylic resin or vinyl resin has **at least one ionic or ionizable group**; and*
- b) at least one **thermoplastic fluoropolymer**, wherein **a) and b) are different**.*

Lunkwitz et al. (col. 9, line 55-67) disclose membrane which comprises a PTFE/polyacrylic acid blend prepared by treating PTFE membrane with polyacrylic acid. Since PTFE is a fluoropolymer and polyacrylic acid contain carboxylic acid groups that are ionic or ionizable, Lunkwitz et al. contain all the inventive features of claims 1, 7, 15, 33 in a single embodiment. Therefore, the invention of claims 1, 7, 15, 33 is anticipated.

Applicant's arguments received on September 4, 2003 have been fully considered but they are not persuasive. Applicants argue that page 6-8 of the specification defines ionic and ionizable groups exclude the acrylic acid groups which are also ionizable. However, the examiner disagrees because the specification (page 7, line 19) basically showing examples of ionic or ionizable groups but the examples does not negate that fact the general disclosure does not exclude acrylic acid as an ionizable group. Therefore, the rejection set forth is proper.

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5. Claims 1-3, 6, 8, 9, 15, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Prakash et al. (WO 98/22989).

*The invention of claims 1-3, 6, 8, 9, 15, 33 relates to a **polymer blend** comprising:*

*a) at least one **acrylic resin** or at least one acrylic resin and at least one vinyl resin, wherein said at least one acrylic resin or vinyl resin has **at least one ionic or ionizable group**; and*

*b) at least one **thermoplastic fluoropolymer**, wherein **a) and b) are different**.*

Prakash et al. (page 7, line 6-17) disclose a membrane composed of a polyblend of sulfonated polystyrene and poly(vinylidene fluoride). Since sulfonated polystyrene is a vinyl resin contain at least one ionic or ionizable sulfonated group, Prakash et al. contain all the inventive features of claims 1-3, 6, 8, 9, 15, 33 in a single embodiment. Therefore, the invention of claims 1-3, 6, 8, 9, 15, 33 is anticipated.

Applicant's arguments received on September 4, 2003 have been fully considered but they are not persuasive. Applicants argue that page 6-8 of the specification defines ionic and ionizable groups exclude the acrylic acid groups which are also ionizable. However, the examiner disagree because the specification (page 7,

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line 19) basically showing examples of ionic or ionizable groups but the examples does not negate that fact the general disclosure does not exclude acrylic acid as an ionizable group. Therefore, the rejection set forth is proper.

6. Claims 1-3, 7, 8, 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Röber et al. (WO 98/22989).

*The invention of claims 1-3, 7, 8, 11 relates to a **polymer blend** comprising:*

- a) at least one **acrylic resin** or at least one acrylic resin and at least one vinyl resin, wherein said at least one acrylic resin or vinyl resin has **at least one ionic or ionizable group**; and*
- b) at least one **thermoplastic fluoropolymer**, wherein **a) and b) are different**.*

Röber et al. (abstract) disclose a multiplayer plastic pipe which contains a layer comprising a mixture (or a blend) of PVDF and an acrylate copolymer. Further, Röber et al. (col. 3, line 50-55) disclose that the acrylate copolymer contains 0-15 weight % of carboxylic acid ionic or ionizable group. Therefore, Röber et al. contain all the inventive features of claims 1-3, 7, 8, 11. Therefore, the invention of claims 1-3, 7, 8, 11 is anticipated.

Applicant's arguments received on September 4, 2003 have been fully considered but they are not persuasive. Applicants argue that page 6-8 of the

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specification defines ionic and ionizable groups exclude the acrylic acid groups which are also ionizable. However, the examiner disagrees because the specification (page 7, line 19) basically showing examples of ionic or ionizable groups but the examples does not negate that fact the general disclosure does not exclude acrylic acid as an ionizable group. Therefore, the rejection set forth is proper.

### ***Allowable Subject Matter***

7. Claims 4, 5, 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art Prakash et al. (WO 98/22989) does not disclose a blend containing a PVDF copolymer or a blend containing a fluorinated acrylic or vinyl resin.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action.

In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (703) 305-0392. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (703) 308-2450. The fax phone numbers for



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the organization where this application or proceeding is assigned are (703) 305-5885 for regular communications and (703) 305-5885 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



William K. Cheung

Patent Examiner

September 10, 2003



DAVID W. WU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700